



# Egley Road, Woking

## Arboricultural Impact Assessment

### Report for Woking Football Club

<b>Job Number</b>	7758.1		
<b>Author</b>	Stefan Harrison BSc (Hons)		
<b>Version</b>	<b>Checked by</b>	<b>Approved by</b>	<b>Date</b>
V4.0	James Potts BSc (Hons) MArborA	Mark Cannon BA (Hons) DipLA MArborA	20/11/19

# Contents

Executive Summary	1
1 Introduction	2
2 Methodology	4
3 Results	6
4 Recommendations	15
References	20
Appendix 1: Schedule of Trees	21
Appendix 2: Tree Constraints Plan	31
Appendix 3: Tree Retention and Removal Plan	37
Appendix 4: Glossary of Terms	43
Appendix 5: Photographs	46

## LIABILITY

The Ecology Consultancy has prepared this report for the sole use of the commissioning party in accordance with the agreement under which our services were performed. No warranty, express or implied, is made as to the advice in this report or any other service provided by us. This report may not be relied upon by any other party without the prior written permission of The Ecology Consultancy. The content of this report is, at least in part, based upon information provided by others and on the assumption that all relevant information has been provided by those parties from whom it has been requested. Information obtained from any third party has not been independently verified by The Ecology Consultancy, unless otherwise stated in the report.

## COPYRIGHT

© This report is the copyright of The Ecology Consultancy. Any unauthorised reproduction or usage by any person is prohibited. The Ecology Consultancy, part of the Temple Group Management Limited, is the trading name of Ecology Consultancy Ltd.

---

# Executive Summary

The Ecology Consultancy was commissioned by Woking Football Club to undertake a ground level survey of trees that could be affected by future works associated with the development of land at Egley Road, Woking. A qualitative assessment of each tree was carried out according to British Standard BS 5837:2012, Trees in Relation to Design, Demolition and Construction– Recommendations, focusing on arboricultural values (categories A1, B1, C1)<sup>1</sup> and landscape values (categories A2, B2, C3)<sup>2</sup>.

The main findings of the survey are as follows:

- There were a total of 32 individual trees, eight groups<sup>3</sup> and one woodland in and adjacent to the proposed development site each described in Appendix 1 of this report.
- A tree constraints check was carried out with Woking Borough Council and it was found that all trees on site are subject to Tree Preservation Order ref. 626/0154/1973. None of the surveyed trees are subject to Conservation Area restrictions.
- Of the trees surveyed, a total of two individuals and one woodland block were attributed Category A status, 19 individuals and seven groups were attributed Category B status, 10 individuals and one group were attributed Category C status and one individual was attributed Category U status.
- Root protection areas were calculated in accordance with BS 5837:2012 for each of the surveyed trees and ranged from 13.6m<sup>2</sup> to 706.9m<sup>2</sup>.
- Any work to trees should consider the potential presence of protected species, including breeding birds and roosting bats. The Preliminary Ecological Appraisal (The Ecology Consultancy, 2019) and any subsequent ecological reports should be consulted prior to the commencement of works

---

<sup>1</sup> Categorisation grading in accordance with BS 5837 2012. Trees suitable for retention: - Category A. Trees of high quality with an estimated remaining life expectancy of at least 40 years.

Category B. Trees of moderate quality with an estimated life expectancy of at least 20 years.

Category C. Trees of low quality with an estimated remaining life expectancy of at least 10 years or young trees with a stem diameter below 150mm.

Category U. Trees of very low quality normally with a life expectancy of less than 10 years or requiring immediate removal due to health and safety concerns.

<sup>2</sup> British Standard BS 5837 2012 recommends that these categories may be further broken down into sub categories A1 A2 A3 pertaining to Arboricultural, Landscape or Cultural values respectively.

<sup>3</sup> The term “group” is intended to identify trees that form cohesive arboricultural features either aerodynamically (e.g. trees that provide companion shelter), visually (e.g. avenues or screens) or culturally, including for biodiversity (e.g. parkland or wood pasture).



# 1 Introduction

## BACKGROUND

- 1.1 The Ecology Consultancy was commissioned on 12 February 2019 by Woking Football Club to carry out an arboricultural survey of trees at Egley Road, Woking and provide a report to inform future design proposals and tree protection. The survey is required to assess the condition of trees that could be affected by future development of the site and provide sufficient information for the development of site layouts and construction exclusion zones to enable the protection of existing trees.

## SCOPE OF REPORT

- 1.2 This report has been produced in accordance with British Standard BS 5837:2012 Trees in Relation to Design, Demolition and Construction – Recommendations (hereafter referred to as BS 5837:2012). It provides information on the current condition of trees at the site, their suitability for retention, and the above and below ground constraints to development.
- 1.3 Any clear flaws or hazards have been identified in the Schedule of Trees provided in Appendix 1. Preliminary recommendations for the management of retained trees are provided, but a full hazard risk assessment comprising a more comprehensive analysis of tree condition and potential risk to target areas is beyond the scope of this report. Any recommendations relating to the management of potentially hazardous trees should be carried out as soon as possible<sup>4</sup>.

## SITE CONTEXT AND STATUS

- 1.4 The site currently comprises open field, with one building located in the north-east of the site. There is a large area of trees in the southern portion of the site and access to the site is via a small road off of Egley Road (A320), located to the east of the site.

---

<sup>4</sup> All tree works should be undertaken by a suitably qualified Arboricultural Contractor. No arboricultural works to trees subject to planning constraints shall be carried out without the written consent of the relevant Local Planning Authority (LPA). Any proposed tree works should be undertaken in accordance with British Standard BS 3998:2010 Treework - Recommendations. Works to trees that are the subject of a Tree Preservation Order or within a Conservation Area which are deemed to be dangerous under Regulation 14 of the Town and Country Planning (England) (Regulations) 2012 may under certain circumstances be undertaken without needing to seek the prior written consent of the LPA.

## DESCRIPTION OF THE PROPOSALS

- 1.5 Proposals comprise the redevelopment of the site, following the demolition of the existing building, to provide a health club building (Class D2) incorporating an external swimming pool and tennis/sports courts, the provision of 36 dwelling houses (Class C3) up to a maximum of 3 storeys in height, associated landscaping and car parking and new vehicular access from an existing road serving Hoe Valley School..

## 2 Methodology

### TREE SURVEY

- 2.1 The tree survey was conducted in accordance with BS 5837:2012 the results of which are presented in the Schedule of Trees (Appendix 1) and include a sequential numbering of each tree, species listed by common name; tree dimensions including overall height, canopy spreads measured against the cardinal compass points; crown height; age class; physiological condition; structural condition, life expectancy; root protection areas and preliminary management advice.
- 2.2 Each tree has been assigned a category grade in accordance with BS 5837:2012 categories A, B, C and U ranging from high to low quality. Definitions of tree quality are provided in Table 3, Appendix 1.
- 2.3 For the purposes of this report, arboricultural as well as landscape sub-categories have been used in the Schedule of Trees. BS 5837:2012 points out that each sub-category should be given equal weighting when grading trees against these criteria.
- 2.4 A tree constraints plan is presented in Appendix 2 showing the recommended root protection areas (RPA) for all surveyed trees and highlighting each grading category using the colour key system as described in BS 5837:2012.
- 2.5 The site was visited on 19 February 2019 and again on 25 March. on each occasion, weather conditions were dry and sunny.
- 2.6 All trees likely to be affected by works inside the red line boundary of the site were visually assessed using the Visual Tree Assessment Method (VTA) (Mattheck and Beloer, 1994)
- 2.7 Stem diameters were measured using diameter tape. Canopy spreads were estimated by pacing and where possible, verified using a laser range finder. Height measurements were taken using a laser clinometer.
- 2.8 Formal assessments of topography, drainage, service conduits and soil conditions including specific laboratory investigations of soil properties (i.e. plasticity index, moisture content, suction pressure) were not undertaken and are beyond the scope of this report.

## DESK STUDY

- 2.9 A tree constraints check was undertaken using the Woking Borough Council online database to search for Tree Preservation Order or Conservation Area restrictions to tree works in or adjacent to the site.

## SUPPORTING DOCUMENTS

- 2.10 Drawing Reference: *0189-7-854A-858A* (Woods Hardwick, 2018) and *LRW\_7884\_L(00)99R Egley Road Woking - Proposed Site - Ground Floor Plan* (Leach Rhodes Walker Architects, 2019) were provided for the purposes of compiling this report.

## PERSONNEL

- 2.11 The tree survey was carried out by James Potts BSc (Hons) MArborA. James is an Arboriculturalist at The Ecology Consultancy with over 5 years' experience within the sector, working as both a contractor and private consultant.

## LIMITATIONS

- 2.12 Only preliminary recommendations for tree management are provided. A full hazard risk assessment comprising a more comprehensive analysis of the condition and potential risk to target areas is beyond the scope of this report.
- 2.13 Several of the trees surveyed were ivy clad, inhibiting standard VTA inspection methods and stem measurements. As such, assumptions have been made relating to the condition and size of ivy clad trees. Management recommendations for ivy clad trees have been made in this report and should be followed to remove any risk that may be posed by them.
- 2.14 The trees were inspected at ground level and no decay detection equipment was used. There is therefore a risk that any internal decay that may be present has gone undetected.
- 2.15 Trees are living organisms and their health and condition change with time. Therefore, this assessment remains valid for 12 months from the date of inspection, or until a severe storm is experienced, after which time a new inspection is required. For the purpose of this report, a severe storm is defined as a period of violent weather, involving rain, hail, wind, snow, lightning or any combination of these, likely to cause damage to trees.

## 3 Results

### TREE SURVEY

- 3.1 The results of the tree survey are provided in the Schedule of Trees in Appendix 1. A Tree Constraints Plan illustrating the BS 5837:2012 categories of each tree, their crown spread and RPA is presented in Appendix 2 and photographs of the site are provided in Appendix 4.
- 3.2 The survey recorded 32 individual trees, eight group and one woodland which could potentially be affected by future development. These comprised: black poplar *Populus nigra*, common hazel *Corylus avellana*, European beech *Fagus sylvatica*, European hornbeam *Carpinus betulus*, goat willow *Salix caprea*, Leyland cypress *Cupressus x leylandii*, pedunculate oak *Quercus robur*, silver birch *Betula pendula*, Sitka spruce *Picea sitchensis*, small leaved lime *Tilia cordata* and wild cherry *Prunus avium*.
- 3.3 Woodland block W1 comprised mixed species, a specific description of the species composition for W1 can be found in the Schedule of Trees in Appendix 1.
- 3.4 The distribution of each species is provided in Table 1 below.

**Table 1: Species key and site frequency for trees potentially affected by development**

Species	Frequency		
	Tree	Group	Woodland
Black poplar	1	-	-
Common hazel	4	-	-
European beech	3	1	-
European hornbeam	1	-	-
Goat willow	1	-	-
Leyland cypress	1	-	-
Mixed species	-	-	1
Pedunculate oak	17	5	-
Silver birch	2	-	-

**Table 1: Species key and site frequency for trees potentially affected by development**

Species	Frequency		
	Tree	Group	Woodland
Sitka spruce	-	1	-
Small leaved lime	-	1	-
Wild cherry	2	-	-

3.5 Physiological and structural condition<sup>5</sup> of the majority of surveyed trees was consistent with Category B status (19 individuals and seven groups), with ten individuals and one group assigned Category C status, two individuals and one woodland assigned Category A status and one individual assigned Category U status.

3.6 Of the trees surveyed, six individuals and one group were classified to be at a mature life stage<sup>6</sup>, two individuals, one group and one woodland were classified as semi mature and 24 individuals and six groups were classified as early mature. No trees were found to be in the young and over mature classifications.

3.7 A summary of the number of trees surveyed corresponding to BS 5837:2012 tree quality assessment definitions is provided below in Table 2 below.

**Table 2: Grade Classifications**

BS 5837:2012 Grades A to U	Trees attributed to each grade	Frequency		
		T	G	W
A	T3, T28, W1	2	-	1
B	T1, T4, T7, T8, T9, T10, T11, T20, T21, T22, T23, T24, T25, T26, T27, T29, T30, T31, T32, G2, G3, G4, G5, G6, G7, G8	19	7	-
C	T2, T5, T6, T12, T13, T14, T15, T16, T17, T19, G1	10	1	-

<sup>5</sup> Physiological and structural condition are terms used to differentiate between a trees physiological condition i.e. annual growth, vigour, presence of disease etc. as opposed to structural condition relating to branch formation, mechanical strength and integrity.

<sup>6</sup> Young. Establishing; usually with good vigour, but as of limited significance within the landscape.  
Semi-Mature. Established; normally vigorous and increasing in height. Of increasing landscape significance.  
Early Mature. Fully established trees around the middle half of their life span retaining good vigour. Not yet achieved full height and retaining apical dominance.  
Mature. Fully established trees retaining moderate vigour. Apical dominance lost but crown still spreading.  
Over Mature. Fully mature trees in the last quarter of their usual life expectancy; vigour declining.

**Table 2: Grade Classifications**

BS 5837:2012 Grades A to U	Trees attributed to each grade	Frequency		
		T	G	W
U	T18	1	-	-

3.8 All Category A and Category B trees, as described in Table 2, should be given priority consideration for retention during any future development which should take full account of above and below ground constraints, as shown on the Tree Constraints Plan (Appendix 2).

3.9 A summary of the condition and value of the most noteworthy trees is provided below, based on information presented in Appendix 1.

- Pedunculate oak T1, was situated 44m south of the northern site boundary and 160m east of the western site boundary. The tree was early mature, was 11m in height, had a single stem with a diameter of 490mm and a maximum canopy radius extending 5m to the south and west. The tree appeared to be in fair structural and physiological condition requiring no immediate remedial works.
- Pedunculate oak T3, was situated 20m south of the northern site boundary and 155m east of the western site boundary. The tree was mature, was 14m in height, had a single stem with a diameter of 1250mm and a canopy radius extending 7.5m in all directions. The tree appeared to be in fair structural and physiological condition requiring no immediate remedial works.
- Common hazel T4, was situated 72m south of the northern site boundary and 102m east of the western site boundary. The tree was an early mature coppice, was 6m in height, had 12 stems with an average diameter of 100mm and a maximum canopy radius extending 3.5m in all directions. The tree appeared to be in good structural condition and fair physiological condition requiring no immediate remedial works.
- Common hazel T7, was situated 132m south of the northern site boundary and 63m east of the western site boundary. The tree was an early mature hazel coppice, was 6m in height, had 12 stems with an average diameter of 100mm and a maximum canopy radius extending 4m in all directions. The tree appeared to be in good structural condition and fair physiological condition requiring no immediate remedial works.

- Common hazel T8, was situated 138m south of the northern site boundary and 60m east of the western site boundary. The tree was an early mature hazel coppice, was 6m in height, had 12 stems with an average diameter of 100mm and a maximum canopy radius extending 4m in all directions. The tree appeared to be in good structural condition and fair physiological condition requiring no immediate remedial works.
- Pedunculate oak T9, was situated directly adjacent to the western site boundary adjacent to the railway, 9m south-west of the north-west corner of the site and 265m north-west of the eastern site boundary. The tree was mature, was 12m in height, had a single stem with a diameter of 650mm and a maximum canopy radius extending 9m to the west. The tree appeared to be in fair structural condition and good physiological condition requiring no immediate remedial works.
- Pedunculate oak T10, was situated on the western site boundary adjacent to the railway, 129m south-west of the north-west corner of the site and 257m west of the eastern site boundary. The tree was early mature, was 13m in height, had a single stem with a diameter of 570mm and a maximum canopy radius extending 8m to the south and east. There was minor deadwood present throughout the canopy and displayed low vigour. Despite this, the tree appeared to be in fair structural and physiological condition requiring no immediate remedial works.
- Pedunculate oak T11, was situated on the western site boundary adjacent to the railway, 135m south-west of the north-west corner of the site and 254m west of the eastern site boundary. The tree was early mature, was 13m in height, had two stems with an average diameter of 400mm and a maximum canopy radius extending 8m to the south and west. The tree's stems were naturally bracing at 1.5m showing signs of full cambial fusion. There was minor deadwood present throughout the canopy and displayed low vigour. Notwithstanding this, the tree appeared to be in fair structural and physiological condition requiring no immediate remedial works.
- Mixed species W1, was situated in the southern part of the site covering approximately 12,310m<sup>2</sup> and extended along the western site boundary. The woodland consisted primarily of pedunculate oak with scattered silver birch, beech and cypress and a row of false acacia on the northern edge. The understorey was sparse and consisted of elder, yew and scattered hazel. The general structure of the woodland became younger and denser towards the east with scattered willow and field maple regeneration. The woodland was semi



mature, had an average height of 15m, an average stem diameter of 580mm and an average canopy radius extending to 4m on all sides. The woodland appeared to be in overall fair structural and physiological condition requiring no immediate remedial works.

### DESK STUDY

3.10 All trees on site were found to be subject to Tree Preservation Order Reference 626/0154/1973. None of the trees surveyed are subject to Conservation Area restrictions.

### ARBORICULTURAL IMPACT ASSESSMENT

3.11 Based upon Drawing Reference: *LRW\_7884\_L(00)99R Egley Road Woking - Proposed Site - Ground Floor Plan* (Leach Rhodes Walker Architects, 2019) received from the client on the 5 November 2019, the impact of the proposal on the existing trees has been assessed and all trees that will potentially be affected by the development are listed below in Table 3. Tree numbers in the table correspond to the Schedule of Trees in Appendix 1 and Tree Constraints Plan described in Appendix 2.

3.12 It has been assumed that the height of all construction traffic or goods vehicles accessing the site will be within the standard minimum carriageway clearance of 5m (HSE, 2017).

**Table 3: Summary of trees possibly affected by the development**

Impact	Reason	BS Cat A	BS Cat B	BS Cat C
<b>Trees to be removed</b>	Located within development footprint.	W1 (25%)	T1, T4, G2, G3, G4	T5, T6, T17, G1
	Health and safety reason	T19, T21		
<b>Trees which could sustain damage to RPA</b>	Excavation for new hardstanding or building foundation	T3	T9, T10, T11, T20, T21, T26	T2
	Soil compaction through construction traffic access	T3, W1	T9, T10, T11, T20, T21, T26	T2, T12, T13, T14, T15, T16

**Table 3: Summary of trees possibly affected by the development**

Impact	Reason	BS Cat A	BS Cat B	BS Cat C
<b>Trees which could sustain damage to stem or canopy</b>	Impact by construction traffic.	T3, W1	T9, T10, T11, T20, T21, T26	T2, T12, T13, T14, T15, T16
<b>Trees to be pruned</b>	Access facilitation	T3	T10, T11	T2

### Tree removal and Pruning

- 3.13 Based upon the design proposal, a total of five individual trees and four groups as described in Table 3, will require removal in order to facilitate access for construction.
- 3.14 Of the trees to be removed, a total of two individuals and three groups were attribute Category B status and four individuals and four groups were attributed Category C status.
- 3.15 Development proposals will also require the removal of the northern edge of Category A woodland block W1, equalling approximately 25% of its total canopy area as displayed in the Tree Retention and Removal plan provided in Appendix 3.
- 3.16 As a result of the partial loss of W1, the poor condition of the tree and the close proximity of the new development, T19 will require removal for health and safety reasons.
- 3.17 Excavations for the installation of foundations for the proposed new pool building will require the severance of a significant portion of the root system of T21 and have the potential to result in destabilization of the tree, especially when considering the increased wind loading that will result from the removal of the northern section of W1. For these reasons, and due to its close proximity to proposed public walkways, it is recommended that T21 be removed as part of proposals for health and safety reasons.
- 3.18 Trees T2 and T3 will require minor pruning in order to facilitate access for the installation of proposed car-parking bays and access roads onto the David Lloyd carpark.
- 3.19 Trees T10 and T11 will also require minor pruning works in order to facilitate access for construction and future use of the proposed tennis courts to be constructed adjacent to the eastern boundary of the site.

Trees which could potentially sustain damage to stem, canopy or RPA.

3.20 Construction activity during development works has the potential to indirectly impact the stem, canopy or RPAs of 13 trees scheduled for retention as displayed in Table 3. In order to ensure that these features are successfully retained during the proposed works, the drafting of specialist tree protection measures as part of an Arboricultural Method Statement and Tree Protection Plan will be required.

Incursions into RPA of trees effected by the development proposal.

3.21 The proposed development will encroach into the RPA's of seven trees to be retained. As displayed in Table 4 below.

**Table 4: Proposed incursions in RPAs of trees to be retained.**

Tree ID	Activity	Total RPA (m <sup>2</sup> )	Area of incursion (m <sup>2</sup> )	Area of Incursion (%)
T2	Installation of hardstanding	122.3	54.7	44.7
T3	Installation of hardstanding	706.9	246.4	34.9
T9	Installation of hardstanding	191.1	14.1	7.4
T10	Installation of hardstanding	147	31.6	21.5
T11	Installation of hardstanding	144.8	4.1	2.8
T20	Installation of hardstanding	113.1	3.9	3.4
T26	Installation of hardstanding	113.1	8.5	7.5

3.22 The level of incursion by the proposed hardstanding inside the RPAs of trees T9, T11 and T20 were calculated to be between 2.8% and 7.4% for T11 and T9 respectively. These RPA incursions are considered to be negligible and unlikely impact the structural or physiological condition of the trees. as a result, specialist methods of construction will not be required.

3.23 Hardstanding for the proposed new David Lloyd carpark will encroach into approximately 34.9% of the total RPA of Category A tree T3. An incursion of this level has the potential to significantly impact the tree.. The use of specialist measures of construction during the installation of proposed hardstanding will be required in order to protect the underlying soil from overloading while maintaining porosity.

- 3.24 Hardstanding for the proposed David Lloyd carpark will also encroach into 44.7% of the total RPA of Category C tree T2, as detailed in Table 3 and displayed in the Tree Retention and Removal Plan (Appendix 3). As with T3, an incursion of this level has the potential to significantly impact the condition of the tree and will require specialist construction methodologies and materials comprising load bearing, porous cellular confinement system (Cellweb or equivalent), to enable its safe retention.
- 3.25 The proposed tennis courts situated adjacent to the western boundary of the site were calculated to encroach into 21.5% of the total RPA of T10. An incursion of this level has the potential to significantly impact the physiological condition of the tree and will require specialist methods of construction as part of a full Arboricultural Method Statement in order to enable its safe retention.

#### Impact on visual amenity and local character

- 3.26 The most significant arboricultural impact resulting from development proposals is the loss of the northern extents of woodland block W1, required to facilitate access for the construction of the proposed new pool building and residential properties. The removal of this section of W1 will be partially screened from the view of the general public through the construction of the new David Lloyd complex and residential properties, to be situated between the canopy edge of W1 and main public line of sight from Egley Road. Approximately 25% of the overall canopy area will be removed, exposing a significant face of the woodland to altered wind loading. While prevailing winds are south-westerly, screening this exposed edge from the majority of wind loading, exposing the northern edge of the woodland still presents potential to result windthrow to new woodland edge planting. New edge planting, forming a buffer between the proposed site and new woodland edge will be required in order to ensure the remainder of the woodland can be successfully retained. Outline recommendations for new edge planting are provided in section 4 of this report.
- 3.27 W1 also contained trees to be removed i.e. T4 and T21 and groups G2, G3 and G4, which were all attributed Category B. Given that these trees and groups were situated within the canopy extents of the woodland, the visual impact of their removal is directly tied to that of the woodland edge. Trees T5, T6, T17 and T19 and group G1 were all attributed Category C status and were also situated inside, or within close proximity of the section of W1 proposed for removal. .

- 3.28 Incursions into the RPA of T3 have the potential to result in a significant impact to its physiological condition. A load bearing, porous cellular confinement system (Cellweb or equivalent), should be used to form the sub-base for any proposed hardstanding within the RPAs of these trees. The system should not require the excavation of existing surfaces to enable installation and should remain porous to allow adequate gaseous and aqueous exchange with the underlying soil.
- 3.29 Pedunculate oak T1 was attributed Category B status for its moderate size and quality as a landscape feature. The visual impact of removing this tree is partially mitigated by the retention of trees T2 and T3 which maintain canopy cover in the area. despite this, the loss of T1 represents a moderate impact to visual public amenity and requires appropriate mitigation as described in Section 4 of this report.

## 4 Recommendations

### SITE SPECIFIC ISSUES

- 4.1 The site is the subject of Area Tree Preservation Order ref. 626/0154/1973 and does not appear to have been resurveyed since 1971. The site and surrounding area will have altered substantially since that time and a detailed resurvey of the site will be necessary and should be undertaken by the Council in order to confirm the locations of protected trees. However, until this has been carried out, as a precaution, it should be the default position that all trees on site are assumed to be protected. In the case that the trees are protected, any works to these trees must first have the prior written consent of Woking Borough Council<sup>7</sup>, unless full planning permission specifically detailing the proposed works has been granted and has not expired. Consent should be sought by the submission of a tree works application, details of which can be found on The Planning Portal national planning application service.

### TREE WORKS

- 4.2 The following tree pruning, and removal operations will be required prior to the commencement of demolition and construction works in order to facilitate access for development.
- Trees T1, T4, T5, T6, T17, T19, G1, G2, G3 and G4 will require removal.
  - Woodland block W1 will require the removal of 25% of its northern canopy extents. A Tree Retention and Removal Plan showing an indicative area requiring removal is provided in Appendix 3 of this Report.
  - T2 will require lower lateral branches in its south-east and west canopy quadrants, crown lifting to a height of 3m above ground level.
  - T3 will require lower lateral branches in its southern canopy quadrant, crown lifting to a height of 4m above ground level.
  - Pedunculate oak trees T10 and T11 will require lateral branches in their south-east canopy quadrants shortening in length by 2.5m.

---

<sup>7</sup> This restriction does not apply to trees protected by Tree Preservation Orders if the tree in question is dead, if the works are necessary to remove an immediate risk of serious harm or for the removal of dead branches from a living tree. In these situations, written notice should be given to the council at least five working days prior to the date of the commencement of works. For full details on Tree Preservation order restrictions and exceptions, see The Town and Country Planning (Tree Preservation)(England) Regulations 2012.

- 4.3 Although not specifically required for the purposes of evaluating design proposals and layouts, preliminary recommendations for tree management are provided below:
- Trees T2, T22, T27, T28 and group G8 should have any retained deadwood removed from their canopy extents as a health and safety precaution
  - all ivy clad trees for which inspection was inhibited should have the ivy cleared and then re-inspected by a trained and competent arboriculturalist; and
  - trees T18 and T29 should be removed due to their poor condition.
- 4.4 All tree works and ivy removal, should give due consideration to the potential presence of protected species, including breeding birds and roosting bats. The Preliminary Ecological Appraisal (The Ecology Consultancy, 2019) and any subsequent ecological reports should be consulted prior to the commencement of works.
- 4.5 Arisings from tree works (e.g. wood piles and standing dead trunks) can provide valuable habitats for wildlife. As such, consideration should be given to their retention on site in areas unlikely to cause issues to public health and safety.
- 4.6 It is recommended that building and road footprints are carefully planned to generally avoid the need for excessive tree surgery. All design layouts should ensure that there is sufficient space between the canopy and the building line to allow construction buffers, scaffolding, future building maintenance and access ensuring a satisfactory spatial quality.
- 4.7 All tree pruning should be carefully planned and undertaken in accordance with *BS 3998: 2010 Recommendation for Tree Works*.
- 4.8 Any recommendations highlighting the management of potentially hazardous trees should be reviewed as soon as is practically possible.

## MITIGATION

- 4.9 A scheme of soft landscaping Ref: *A241-ER-GA01-03D* (Arc Landscape Design, 2019), has been prepared and includes tree planting details which address the potential loss of visual public amenity where tree removal has been deemed unavoidable. The tree selection should be appropriate to the site and chosen from a species palette in accordance with local tree planting policies, as well as being in accordance with any recommendations provided in the Preliminary Ecological Appraisal and any subsequent ecology reports.

4.10 Often the need for future remedial pruning or tree removal can be avoided through careful species selection and planning during the design of the mitigation planting scheme.

4.11 The positioning of mitigation planting in relation to new or existing buildings should take full account of the final canopy height and spread of all trees included in the planting scheme. Buildings should ideally be located a sufficient distance from the predicted canopy line and RPA to avoid future pressure to undertake remedial pruning or tree removal.

#### Edge planting and mitigation tree works for W1

4.12 Removal of the northern edge of W1 will require significant numbers of new planting to separate the woodland edge from the proposed development site. This will protect the newly exposed edge from wind throw, while also providing a wildlife buffer between the woodland and new David Lloyd complex and residential properties.. This will likely require the removal of an additional 5m buffer between site and woodland boundaries in order to create space to install the proposed edge planting. Additionally, it may be prudent to undertake selective reductions to established trees forming the new woodland edge, shaping the canopy structure to reduce wind loading and shear stress on established trees.

4.13 Planting and mitigation pruning should be staged into layers, separating the new woodland edge from the proposed site.

- The first layer should comprise a continuous hedgerow layer of mixed native shrubs to be planted directly adjacent to the southern boundary of the development site, to act as an initial windbreak and wildlife vector. The hedgerow layer should be interspersed with standard native trees of smaller species, i.e. field maple, to be planted at even intervals, providing diversity and structure to the woodland edge.
- A secondary layer of evenly spaced heavy/extra heavy standard trees of larger species, i.e. oak should be planted behind the hedgerow layer to provide a second stage of shelter belt/windbreaking. New tree planting should be interspersed with mixed native shrubs to provide weed suppression and wildlife continuity.
- Existing trees on the woodland edge should be selectively reduced in order to achieve a continuous canopy line with the new trees in the secondary layer. Where appropriate, gaps created within the existing woodland canopy line should be



bolstered with the planting of additional heavy standards interspersed between existing, established trees to form one continuous canopy.

- 4.14 Recommended mitigation works to the new woodland edge should be undertaken and completed prior to the commencement of any demolition or construction works on site. Once planted, new edge planting should be barriered off from demolition and construction works using protective fencing in accordance with figure 2 of BS 5837:2012.
- 4.15 New edge planting should be included in a schedule of aftercare and maintenance, including irrigation, as well as protection and formative pruning during establishment. Specifications for aftercare should be appropriate to the proposed planting and should be in compliance with Section 11 of BS 8545:2014 *Trees from nursery to establishment in the landscape- Recommendations*.

### **ISSUES FOR THE ARBORICULTURAL METHOD STATEMENT**

- 4.16 The location of new buildings should take into consideration the maximum canopy height and width of all trees to be retained. Buildings should ideally be situated beyond the RPAs of the trees to be retained and allow sufficient distance from the existing canopy line to avoid future pressure to undertake remedial pruning or tree removal. Where the location of buildings inside the RPA is unavoidable, special engineering of foundations will be required and presented in a future method statement.
- 4.17 In order to minimise disturbance in the RPAs of retained trees, excavation into the soil or soil regrading should not be a requirement of finalised construction layouts, existing levels should remain intact and should be protected from overloading to prevent soil compaction.
- 4.18 Protective fencing should be installed accordance with figure 2 of BS 5837:2012 to enable the safe retention of trees to be retained. The positioning of tree protection and the establishment of construction exclusion zones (CEZ) should initially be based upon the root protection areas as described in Appendix 1 and should be in place prior to the commencement of works.
- 4.19 All works should be undertaken from outside the RPA wherever possible. Where working in an RPA is unavoidable, ground protective measures fully compliant with section 6.2 of BS 5837: 2012 and agreed by the consulting arboriculturalist should be implemented.

4.20 Where construction of new buildings or hardstanding inside RPAs is likely to significantly impact a trees physiological or structural condition, specialist methods of construction should be developed and specified as part of the Arboricultural Method Statement

# References

- Arc Landscape Design, (2019). *A241-ER-GA01-03D Landscape General Arrangement*.
- British Standard Institute (BSI) (2012). *BS 5837:2012 Trees in Relation to Design Demolition and Construction-Recommendations*. BSI, London.
- British Standard Institute (BSI) (2010). *BS 3998:2010 Recommendation for Tree Works*. BSI, London.
- British Standard Institute (BSI) (2014). *BS 8545:2014 Trees: from nursery to independence in the landscape - Recommendations*. BSI, London.
- Department for Communities and Local Government (2014). *Planning Practice Guidance on Tree Preservation Orders and trees in conservation areas*.
- HSE. (2017). *Vehicles at work: Height restrictions* [Online] Available from: <http://www.hse.gov.uk/workplacetransport/factsheets/height.htm>.
- Leach Rhodes Walker Architects, (2019). *LRW\_7884\_L(00)99R Egley Road Woking - Proposed Site - Ground Floor Plan*.
- Lonsdale, D. (1999). *Research for Amenity Trees No.7: Principles of Tree Hazard Assessment and Management*. HMSO
- Mattheck and Beloer (1994). HMSO London. Research for Amenity Trees No 4; *The Body Language of Trees*.
- The Ecology Consultancy (2019). *7758\_Woking Football Club\_Egley Road, Woking\_PEA*
- Town and Country Planning Act 1990 (as amended).
- Town and Country Planning (Tree Preservation) (England) Regulations 2012.
- Woods Hardwick (2018). *0189-7-854A-858A*

## Appendix 1: Schedule of Trees

**Table 1: Schedule of Trees and Tree Quality Assessment\***

\* See Table 3 for key to terms  
 \*\* See Table 2 for definitions of categories

No	Species	Ht.	S	St. 1.5 m	Canopy Spread				Cr. CI	Ls	SC	PC	Comments /Observation	Preliminary Management Advice	LE	Cat **	RPAm 2	RPA r
					N	S	E	W										
T1	Pedunculate oak	11	1	490	3	5	3	5	2	EM	Fair	Fair	-	No immediate works required.	40+	B2	108.6	5.9
T2	Pedunculate oak	11	1	520	5	5	4	4	2	EM	Fair	Fair	Torn out branch stubs on main stem. Multiple retained dead limbs.	Remove dead limbs.	20-40	C1	122.3	6.2
T3	Pedunculate oak	14	1	1250	7.5	7.5	7.5	7.5	2.5	M	Fair	Fair	Minor epicormic growth in canopy.	No immediate works required.	40+	A2	706.9	15
T4	Common hazel	6	12	100	3.5	3.5	3.5	3.5	1	EM	Good	Fair	Old hazel coppice.	No immediate works required.	40+	B1	54.3	4.2
T5	Silver birch	14	1	385	3.5	3.5	3.5	3.5	4	EM	Fair	Fair	-	No immediate works required.	20-40	C1	67.1	4.6
T6	Silver birch	14	1	385	3.5	3.5	3.5	3.5	4	EM	Fair	Fair	-	No immediate works required.	20-40	C1	67.1	4.6
T7	Common hazel	6	12	100	4	4	4	4	1	EM	Good	Fair	Old hazel coppice.	No immediate works required.	40+	B1	54.3	4.2
T8	Common hazel	6	12	100	4	4	4	4	1	EM	Good	Fair	Old hazel coppice.	No immediate works required.	40+	B1	54.3	4.2
T9	Pedunculate oak	12	1	650	5.5	7	8	9	2	M	Fair	Good	On site boundary next to railway. Minor deadwood in canopy.	No immediate works required.	40+	B1	191.1	7.8
T10	Pedunculate oak	13	1	570	5	8	8	7	2	EM	Fair	Fair	On site boundary next to railway. Minor deadwood in canopy.	No immediate works required	40+	B2	147	6.8

**Table 1: Schedule of Trees and Tree Quality Assessment\***

\* See Table 3 for key to terms  
 \*\* See Table 2 for definitions of categories

No	Species	Ht.	S	St. 1.5 m	Canopy Spread				Cr. CI	Ls	SC	PC	Comments /Observation	Preliminary Management Advice	LE	Cat **	RPAm 2	RPA r
					N	S	E	W										
T11	Pedunculate oak	13	2	400	5	8	7	8	2	EM	Fair	Fair	On site boundary next to railway. Minor deadwood in canopy. Low vigour. Stems are fused at 1.5m.	No immediate works required	40+	B2	144.8	6.8
T12	Common hazel	8	12	70	5	6	6	5.5	3	M	Fair	Good	Old hazel coppice.	No immediate works required	10_20	C2	26.6	2.9
T13	Pedunculate oak	9	1	300	4	5	4.5	5	2	SM	Fair	Fair	Minor deadwood in canopy. Low vigour.	No immediate works required	20-40	C2	40.7	3.6
T14	Wild cherry	9	1	350	3	5	4.5	3.5	2	EM	Fair	Poor	Minor deadwood in canopy. Low vigour.	No immediate works required	10_20	C1	55.4	4.2
T15	Wild cherry	9	1	350	5	3	4.5	3.5	2	EM	Fair	Poor	Minor deadwood in canopy. Low vigour.	No immediate works required	10_20	C1	55.4	4.2
T16	Leyland cypress	8	1	260	3	3	3	3	1	EM	Fair	Fair	Low vigour. Growing next to road.	No immediate works required	10_20	C2	30.6	3.1
T17	Goat willow	5	3	100	3	3	3	3	0	EM	Fair	Fair	Growing from fallen stump.	No immediate works required	10_20	C2	13.6	2.1
T18	Pedunculate oak	8	1	400	0	0	0	0	2	SM	Fair	Poor	Stem with all branches pruned to stubs. Small amount of live growth but tree will not survive.	Remove	0-10	U	72.4	4.8
T19	European hornbeam	20	1	850	6	6	6	6	4	M	Poor	Fair	Ganoderma bracket at base to north. Included bark union at 1m.	Remove	10_20	C3	326.9	10.2

**Table 1: Schedule of Trees and Tree Quality Assessment\***

\* See Table 3 for key to terms  
 \*\* See Table 2 for definitions of categories

No	Species	Ht.	S	St. 1.5 m	Canopy Spread				Cr. CI	Ls	SC	PC	Comments /Observation	Preliminary Management Advice	LE	Cat **	RPAm 2	RPA r
					N	S	E	W										
T20	Pedunculate oak	18	1	500	5	4	4	4	4	EM	Good	Fair	-	No immediate works required	40+	B2	113.1	6
T21	European beech	20	1	760	5	5	5	5	2	M	Good	Fair	Fastigiate	No immediate works required	40+	B1	261.3	9.1
T22	Pedunculate oak	17	1	550	2.5	5	5	5	3	EM	Fair	Fair	Moderate retained deadwood	Remove deadwood	40+	B1	136.8	6.6
T23	Pedunculate oak	17	1	500	4	4	6	3		EM	Fair	Fair	-	No immediate works required	40+	B2	113.1	6
T24	Pedunculate oak	17	1	500	4	4	6	3		EM	Fair	Fair	-	No immediate works required	40+	B2	113.1	6
T25	Pedunculate oak	17	1	500	4	4	6	3		EM	Fair	Fair	-	No immediate works required	40+	B2	113.1	6
T26	Pedunculate oak	17	1	500	4	4	6	3		EM	Fair	Fair	-	No immediate works required	40+	B2	113.1	6
T27	Pedunculate oak	14	1	800	3	5	5	4	3	EM	Fair	Fair	Heavily ivy clad.	Sever ivy and remove deadwood	40+	B1	289.5	9.6
T28	Black poplar	22	2	755/ 725	6.5	6.5	6.5	6.5	7.5	M	Good	Good	Multiple dead branch stubs on main stem	Remove branch stubs and lower branches up to 10m	40+	A2	495.7	12.6
T29	Pedunculate oak	14	1	510	5	6	4	5	3.5	EM	Good	Fair	-	No immediate works required	40+	B1	117.7	6.1

**Table 1: Schedule of Trees and Tree Quality Assessment\***

\* See Table 3 for key to terms  
 \*\* See Table 2 for definitions of categories

No	Species	Ht.	S	St. 1.5 m	Canopy Spread				Cr. CI	Ls	SC	PC	Comments /Observation	Preliminary Management Advice	LE	Cat **	RPAm 2	RPA r
					N	S	E	W										
T30	European beech	16	1	650	6.5	6	6	3	3	EM	Fair	Good	Co-dominant canopy with neighbour	No immediate works required	40+	B1	191.1	7.8
T31	European beech	16	1	650	6.5	6	3	6	3	EM	Fair	Good	Co-dominant canopy with neighbour	No immediate works required	40+	B1	191.1	7.8
T32	Pedunculate oak	17	1	570	4.5	7	7	7	5	EM	Good	Fair	-	No immediate works required	40+	B1	147	6.8
G1	Sitka spruce	13	1	250	3	1	3	1	1	SM	Fair	Fair	Linear group of four trees.	No immediate works required	40+	C2	-	3
G2	Pedunculate oak	13	1	400	5	3	4	4	2.5	EM	Fair	Fair	-	No immediate works required	20-40	B2	-	4.8
G3	Pedunculate oak	16	1	450	5	5	5	5	3	EM	Good	Good	Group of seven oak trees on north woodland boundary	No immediate works required	40+	B2	-	5.4
G4	Pedunculate oak	15	1	400	5	5	5	5	3	EM	Good	Good	Group of five oak trees on north woodland boundary	No immediate works required	40+	B2	-	4.8
G5	European beech	17.5	1	450	6	6.5	5	5	2	EM	Good	Good	Group of three trees. north tree has included cup union at 1.8m	No immediate works required	40+	B2	-	5.4
G6	Pedunculate oak	15	5	465	3	6	6	4	3	EM	Fair	Fair	Group of six larger oaks with associated understory extending close to southern boundary	No immediate works required	40+	B2	-	5.6



**Table 1: Schedule of Trees and Tree Quality Assessment\***

\* See Table 3 for key to terms  
 \*\* See Table 2 for definitions of categories

No	Species	Ht.	S	St. 1.5 m	Canopy Spread				Cr. CI	Ls	SC	PC	Comments /Observation	Preliminary Management Advice	LE	Cat **	RPAm 2	RPA r
					N	S	E	W										
G7	Small leaved lime	18	8	270x 8	3	3	4	4	8	M	Fair	Good	Group of five mature coppice.;	No immediate works required	40+	B2	-	9.2
G8	Pedunculate oak	17	1	700	3	4	5	5	3	EM	Fair	Fair	Group of one large and four smaller semi mature oaks, all ivy clad.	Sever ivy, remove surrounding dead, fallen stems and ivy. Bolster RPA with complementary planting	40+	B2	-	8.4

Table 1: Schedule of Trees and Tree Quality Assessment\*

\* See Table 3 for key to terms  
 \*\* See Table 2 for definitions of categories

No	Species	Ht.	S	St. 1.5 m	Canopy Spread				Cr. CI	Ls	SC	PC	Comments /Observation	Preliminary Management Advice	LE	Cat **	RPAm 2	RPA r
					N	S	E	W										
W1	Mixed species	15	1	580	4	4	4	4	4	SM	Fair	Fair	Woodland consisting primarily of pedunculate oak with scattered silver birch, beech and cypress. The understorey is sparse and consists of elder, yew and hazel. Row of false acacia on northern edge. The woodland becomes younger and denser towards the east with scattered willow and field maple regeneration. Managed hazel coppice stools in the south-east corner. Minor ivy cladding scattered throughout woodland.	No immediate works required	40+	A2	-	7

**Table 2: BS: 5837 2012 Tree Quality Assessment Definitions**

TREES FOR REMOVAL		
Category & Definition	Criteria	Identification on Plan
<p><b>Category U</b> Those in such a condition that they cannot realistically be retained as a living trees in the context of the current land use for longer than 10 years.</p>	<ul style="list-style-type: none"> <li>• Trees that have a serious, irremediable structural defect such that their early loss is expected due to collapse, including those that will become unviable after removal of other U category trees (i.e. Where for whatever reason the loss of companion shelter cannot be mitigated by pruning)</li> <li>• Trees that are dead or are showing signs of significant immediate or irreversible overall decline.</li> <li>• Trees infected with pathogens of significance to the health and or safety of other trees nearby by or very low quality trees suppressing adjacent trees of better quality.</li> </ul>	RED

TREES TO BE CONSIDERED FOR RETENTION				
Category & Identification	1 Mainly arboricultural values	2 Mainly landscape values	3 Mainly cultural values including conservation	Identification on plan
<p><b>Category A</b> Trees of High Quality with an estimated remaining life expectancy of at least 40 years</p>	Trees that are a particularly good example of their species, especially if rare or unusual, or essential components of groups or of formal or semi-formal arboricultural features e.g. the dominant and/or principal trees in an avenue)	Tree groups or woodlands of particular visual importance as arboricultural and/or landscape features.	Tree groups or woodlands of significant conservation historical commemorative or other value (e.g. veteran trees or wood pasture)	GREEN
<p><b>Category B</b> Trees of moderate quality with an estimated remaining life expectancy of at least 20 years.</p>	Trees that might be included in the high category but are downgraded because of impaired condition (e.g. presence of remediable defects including unsympathetic past management and minor storm damage).	Trees present in numbers, usually as groups or woodlands such that they attract a higher collective rating than they might as individuals: or trees occurring as collectives but situated so as to make little visual contribution to the wider locality.	Trees with material conservation or other cultural benefits.	BLUE

TREES TO BE CONSIDERED FOR RETENTION

Category & Identification	1 Mainly arboricultural values	2 Mainly landscape values	3 Mainly cultural values including conservation	Identification on plan
<p><b>Category C</b> Trees of a low quality with an estimated remaining life expectancy of at least 10 years or young trees with a stem diameter below 150mm</p>	<p>Unremarkable trees of very limited merit or such impaired condition that they do not qualify in higher categories.</p>	<p>Trees present in groups or woodlands but without this conferring on them significantly greater landscape value and/or trees offering low or only temporary/transient landscape benefits.</p>	<p>Trees with no material conservation or other cultural benefits.</p>	<p>GREY</p>

**Table 3: Key Schedule of Trees**

Column Heading	Explanation
<b>Tree No</b>	Sequential number corresponding to number on plan.
<b>Species</b>	English names.
<b>Ht.</b>	Height in metres.
<b>S</b>	Number of main stems.
<b>St. 1.5 (Stem Diameter)</b>	Stem diameter when measured in accordance with Annex C of BS 5837:2012.
<b>NSEW</b>	Crown radius in metres to cardinal points of the compass.
<b>Cr. Cl. (Crown Clearance)</b>	Height in metres between the ground and underside of canopy.
<b>LS.</b>	Life stage definitions. Y= Young. SM = Semi-mature. EM = Early mature. M = Mature. OM = Over mature.
<b>SC</b>	Brief description of structural condition.
<b>PC</b>	Brief description of physiological condition.
<b>Preliminary Advice</b>	Preliminary tree works advice and recommendations.
<b>LE</b>	Estimated remaining useful life contribution in years. <10, 10+, 20+ and 40+ yr.
<b>Cat. (Category)</b>	<p>Categorisation grading in accordance with BS 5837 2012.</p> <p>Trees suitable for retention: - Category A trees of high quality and amenity value. Category B trees of moderate quality and amenity value. Category C trees of low quality or amenity value.</p> <p>British Standards BS 5837:2012 recommends that these categories may be further broken down into sub-categories A1 A2 A3 pertaining to Arboricultural, Landscape or Cultural values respectively.</p>
<b>RPA m<sup>2</sup></b>	Root Protection Area (RPA). Indicative area around a tree measured in m <sup>2</sup> and calculated in accordance with Annex C of BS 5837:2012 deemed to contain sufficient rooting volume to maintain the viability of a tree and where the protection of roots and soil structure is treated as a priority.
<b>RPA r</b>	Root Protection Area (RPA) radius calculation centred on the base of the tree and calculated in accordance with Annex C of BS 5837:2012

## Appendix 2: Tree Constraints Plan





Job title  
**Egley Road**  
TEC Job no. ET7758.1

Client  
**Woking Football Club**

Map title  
**Overview Tree Constraints Plan**

Section: N/A      Scale (at A3) 1:1250

Date of survey  
**19/02/2019**

Surveyor  
**James Potts**

Drawn JD	Approved JP	Date 07/11/2019
-------------	----------------	--------------------

- Legend**
- Crown spread of category C - Trees with low quality and value
  - Crown spread of category B - Trees with moderate quality and value
  - Crown spread of category A - Trees with high quality and value
  - Crown spread of category U - Trees of poor quality
  - Root Protection Area (RPA)

This plan is provided solely for the purpose of supporting the description of the arboricultural features of the site as contained in the accompanying report





**The Ecology Consultancy**

Job title: **Egley Road**  
TEC Job no. ET7758.1

Client: **Woking Football Club**

Map title: **Tree Constraints Plan**

Section: 1/4      Scale (at A3): 1:600

Date of survey: 19/02/2019

Surveyor: James Potts/Stefan Harrison

Drawn	Approved	Date
JP	JD	07/11/2019

**Legend**

- Crown spread of category C - Trees with low quality and value
- Crown spread of category B - Trees with moderate quality and value
- Crown spread of category A - Trees with high quality and value
- Crown spread of category U - Trees of poor quality
- ▨ Root Protection Area (RPA)

This plan is provided solely for the purpose of supporting the description of the arboricultural features of the site as contained in the accompanying report





**The Ecology Consultancy**

Job title: **Egley Road**  
TEC Job no. ET7758.1

Client: **Woking Football Club**

Map title: **Tree Constraints Plan**

Section: 2/4      Scale (at A3): 1:600

Date of survey: 19/02/2019

Surveyor: James Potts/Stefan Harrison

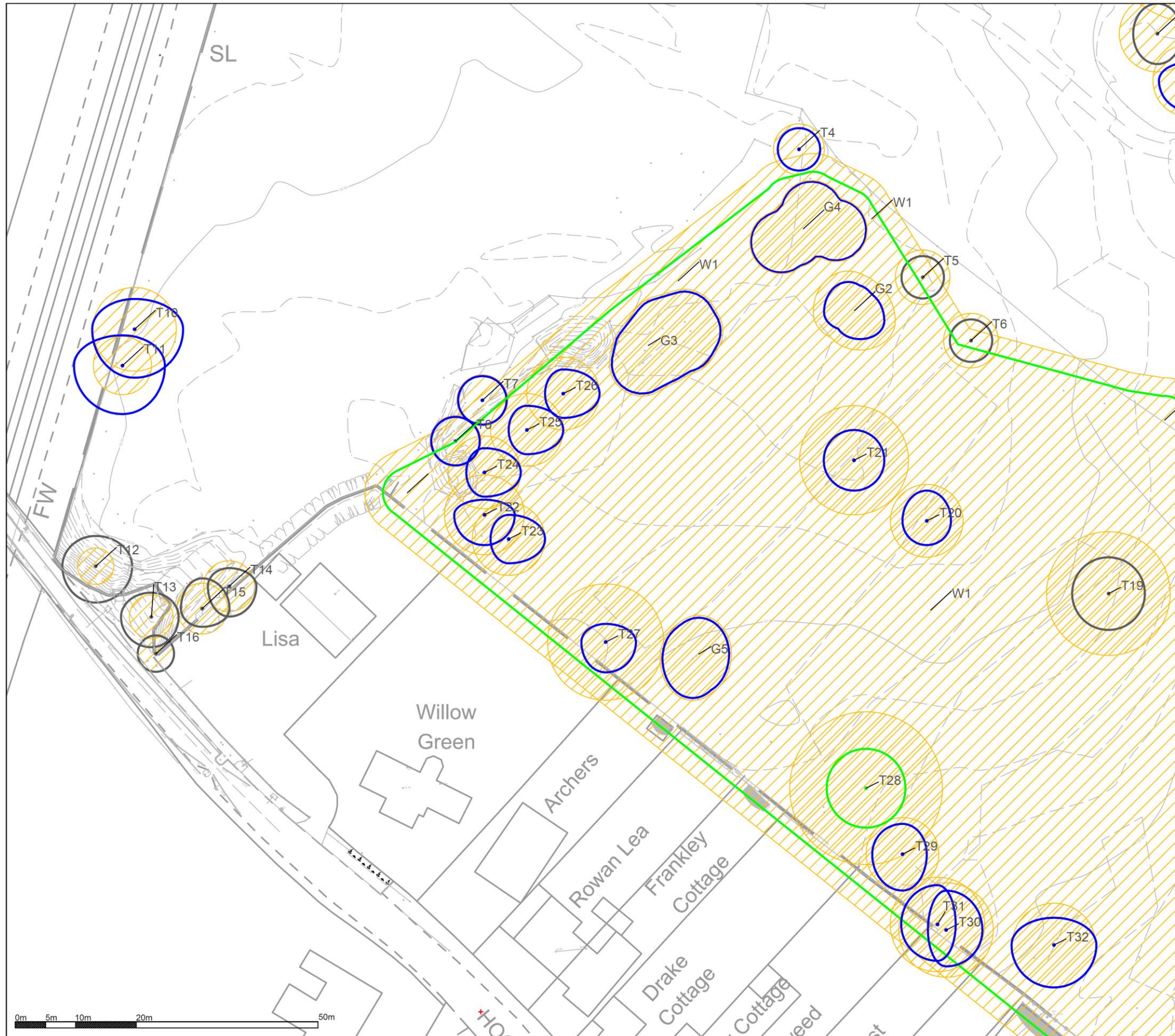
Drawn: JP	Approved: JD	Date: 07/11/2019
-----------	--------------	------------------

**Legend**

- Crown spread of category C - Trees with low quality and value
- Crown spread of category B - Trees with moderate quality and value
- Crown spread of category A - Trees with high quality and value
- Crown spread of category U - Trees of poor quality
- Root Protection Area (RPA)

This plan is provided solely for the purpose of supporting the description of the arboricultural features of the site as contained in the accompanying report





**The Ecology Consultancy**

Job title: **Egley Road**  
TEC Job no. ET7758.1

Client: **Woking Football Club**

Map title: **Tree Constraints Plan**

Section: 3/4      Scale (at A3): 1:600

Date of survey: 19/02/2019

Surveyor: James Potts/Stefan Harrison

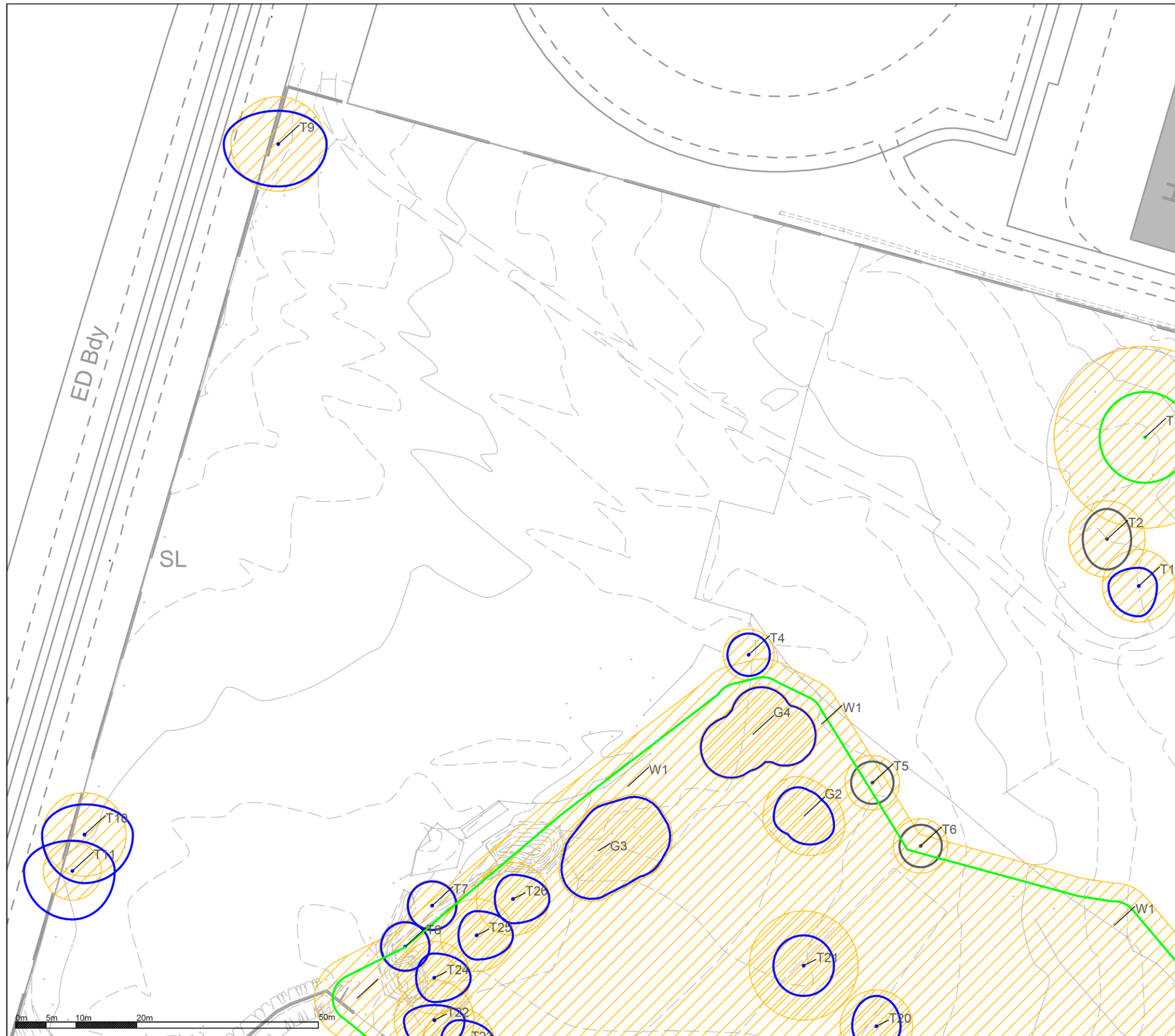
Drawn: JP	Approved: JD	Date: 07/11/2019
-----------	--------------	------------------

**Legend**

- Crown spread of category C - Trees with low quality and value
- Crown spread of category B - Trees with moderate quality and value
- Crown spread of category A - Trees with high quality and value
- Crown spread of category U - Trees of poor quality
- Root Protection Area (RPA)

This plan is provided solely for the purpose of supporting the description of the arboricultural features of the site as contained in the accompanying report





**The Ecology Consultancy**

Job title: **Egley Road**  
TEC Job no. ET7758.1

Client: **Woking Football Club**

Map title: **Tree Constraints Plan**

Section: 4/4      Scale (at A3): 1:600

Date of survey: 19/02/2019

Surveyor: James Potts/Stefan Harrison

Drawn: JP	Approved: JD	Date: 07/11/2019
-----------	--------------	------------------

**Legend**

- Crown spread of category C - Trees with low quality and value
- Crown spread of category B - Trees with moderate quality and value
- Crown spread of category A - Trees with high quality and value
- Crown spread of category U - Trees of poor quality
- ▨ Root Protection Area (RPA)

This plan is provided solely for the purpose of supporting the description of the arboricultural features of the site as contained in the accompanying report

## Appendix 3: Tree Retention and Removal Plan





**The Ecology Consultancy**

Job title: **Egley Road**  
Job no. ET7758.1

Client: **Woking Football Club**

Map title: **Overview Tree Retention and Removal Plan**

Section: N/A      Scale (at A3): 1:1250

Date of survey: 19/02/2019

Surveyor: James Potts

Drawn: JP	Approved: MC	Date: 07/11/2019
-----------	--------------	------------------

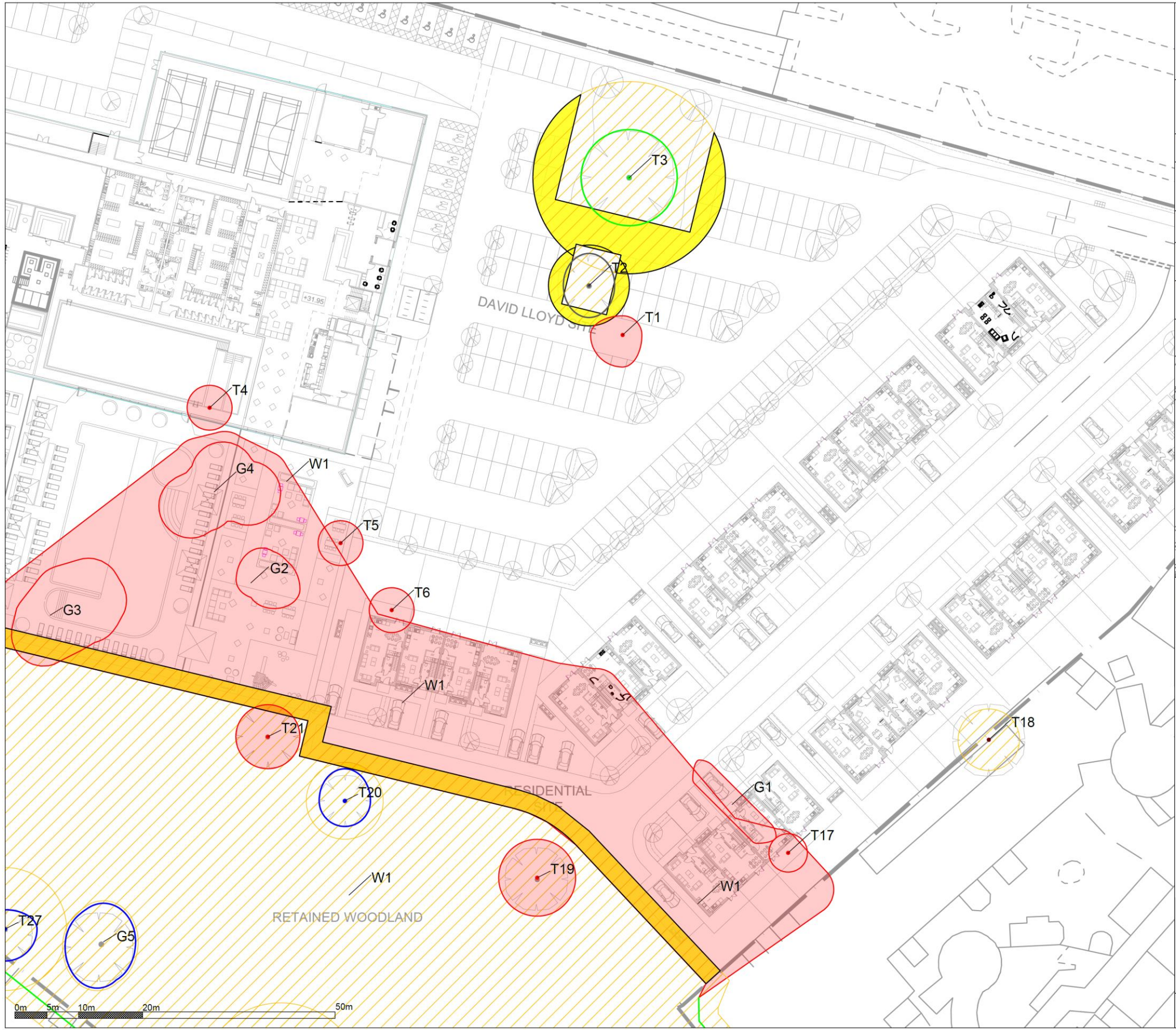
**Legend**

- Crown spread of category B - Trees with moderate quality and value
- Crown spread of category A - Trees with high quality and value
- Crown spread of category U - Trees of poor quality
- Root Protection Area (RPA)
- Trees to be removed
- RPA Incursion

N

This plan is provided solely for the purpose of supporting the description of the arboricultural features of the site as contained in the accompanying report





Job title  
**Egley Road**  
Job no. ET7758.1

Client  
**Woking Football Club**

Map title  
**Tree Retention and Removal Plan**

Section: 1/4 Scale (at A3) 1:600

Date of survey  
19/02/2019

Surveyor  
James Potts

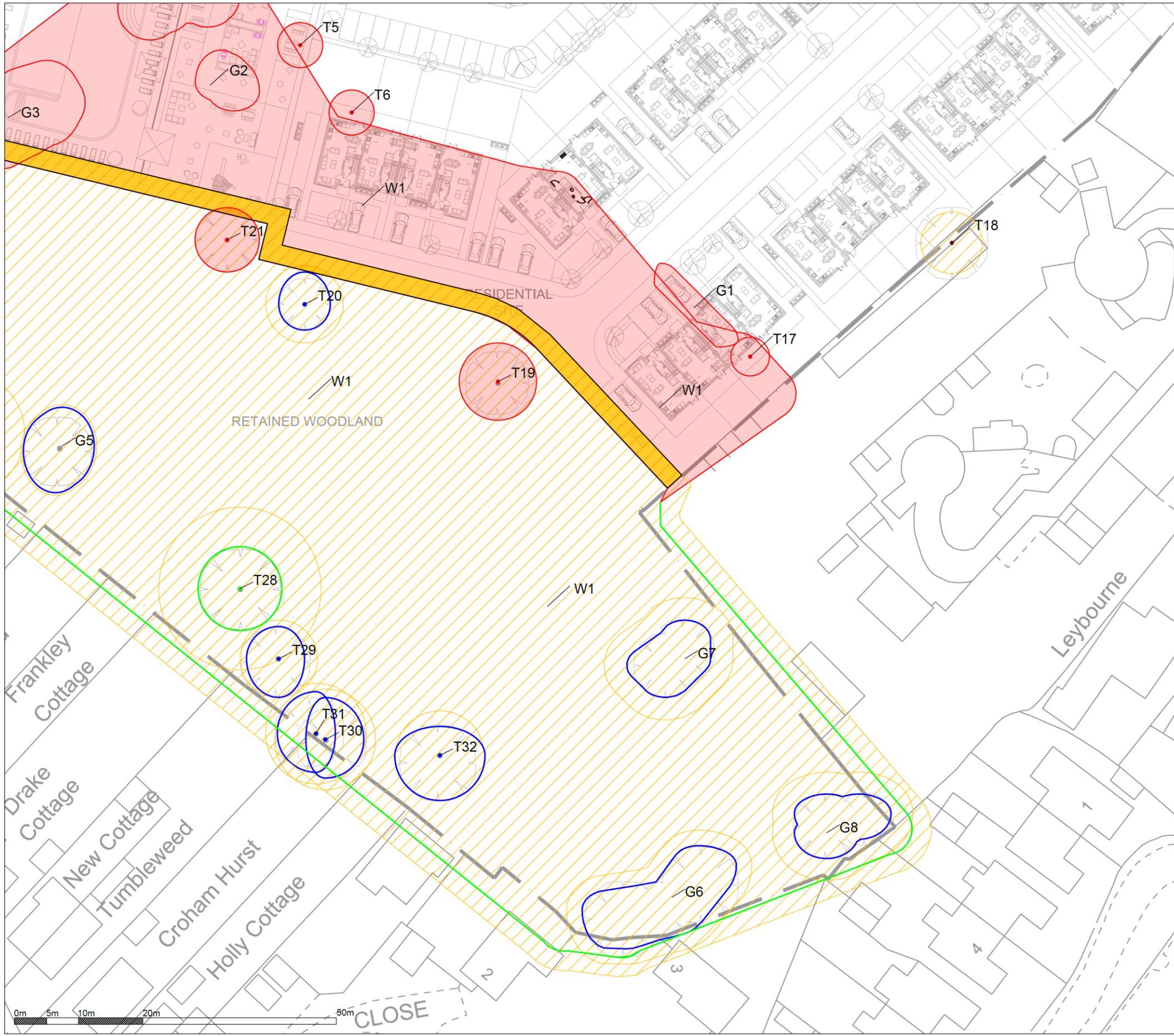
Drawn JP	Approved MC	Date 07/11/2019
-------------	----------------	--------------------



- Legend
- Crown spread of category C - Trees with low quality and value
  - Crown spread of category B - Trees with moderate quality and value
  - Crown spread of category A - Trees with high quality and value
  - Crown spread of category U - Trees of poor quality
  - Root Protection Area (RPA)
  - Trees to be removed
  - RPA Incursion

This plan is provided solely for the purpose of supporting the description of the arboricultural features of the site as contained in the accompanying report





**The Ecology Consultancy**

Job title: **Egley Road**  
Job no. ET7758.1

Client: **Woking Football Club**

Map title: **Tree Retention and Removal Plan**

Section: 2/4      Scale (at A3): 1:600

Date of survey: 19/02/2019

Surveyor: James Potts

Drawn	Approved	Date
JP	MC	07/11/2019

**Legend**

- Crown spread of category C - Trees with low quality and value
- Crown spread of category B - Trees with moderate quality and value
- Crown spread of category A - Trees with high quality and value
- Crown spread of category U - Trees of poor quality
- Root Protection Area (RPA)
- Trees to be removed
- RPA Incursion

This plan is provided solely for the purpose of supporting the description of the arboricultural features of the site as contained in the accompanying report





The Ecology Consultancy

Job title: Egley Road  
Job no. ET7758.1

Client: Woking Football Club

Map title: Tree Retention and Removal Plan

Section: 3/4      Scale (at A3): 1:600

Date of survey: 19/02/2019

Surveyor: James Potts

Drawn: JP	Approved: MC	Date: 07/11/2019
-----------	--------------	------------------

Legend

- Crown spread of category C - Trees with low quality and value
- Crown spread of category B - Trees with moderate quality and value
- Crown spread of category A - Trees with high quality and value
- Crown spread of category U - Trees of poor quality
- ▨ Root Protection Area (RPA)
- Trees to be removed
- RPA Incursion

This plan is provided solely for the purpose of supporting the description of the arboricultural features of the site as contained in the accompanying report





The Ecology Consultancy

Job title: Egley Road  
Job no. ET7758.1

Client: Woking Football Club

Map title: Tree Retention and Removal Plan

Section: 4/4      Scale (at A3): 1:600

Date of survey: 19/02/2019

Surveyor: James Potts

Drawn: JP	Approved: MC	Date: 07/11/2019
-----------	--------------	------------------

Legend

- Crown spread of category C - Trees with low quality and value
- Crown spread of category B - Trees with moderate quality and value
- Crown spread of category A - Trees with high quality and value
- Crown spread of category U - Trees of poor quality
- Root Protection Area (RPA)
- Trees to be removed
- RPA Incursion

This plan is provided solely for the purpose of supporting the description of the arboricultural features of the site as contained in the accompanying report

## Appendix 4: Glossary of Terms



## Glossary of Terms

Term	Explanation
<b>Arboricultural Impact Assessment (AIA)</b>	Evaluation of direct and indirect effects of a proposed design and/or construction.
<b>Arboricultural Method Statement (AMS)</b>	Methodology for the implementation of any aspect of development that is in the root protection area or has the potential to result in the loss of or damage to a tree to be retained.
<b>Branch structure</b>	Qualitative description of formation of main framework of limbs and branches.
<b>Canopy face</b>	Orientation of canopy relative to cardinal points of the compass
<b>Canopy radius</b>	A measurement taken from the centre of a tree to the furthest radial extension of tree canopy relative to the cardinal points of the compass.
<b>Competent Person</b>	Person who has training and experience relevant to the matter being addressed and an understanding of the requirements of the particular task being approached.
<b>Conservation Area</b>	Local Planning Authority special designation generally prohibiting tree works without 6 weeks prior written notification.
<b>Construction Exclusion Zone (CEZ)</b>	Area based upon the calculated root protection area prohibiting access.
<b>Cavity</b>	Open and exposed aperture where wood tissue has internally degraded.
<b>Constraints check</b>	Formal search of local authority records to determine legal and statutory constraints on tree works.
<b>Coppicing</b>	Coppicing is a traditional method of woodland management which exploits the capacity of many species of trees (such as hazel) to put out new shoots from their stump or roots if cut down. In a coppiced wood young tree stems are repeatedly cut down to near ground level.
<b>Crown lifting</b>	Removal of lower branches to achieve a stated vertical clearance above ground level or other surface.
<b>Crown reduction</b>	Pruning of a trees canopy in both height and width.
<b>Decay</b>	Deterioration and breakdown of tree wood fibres resulting in structural and/or physiological dysfunction of a tree.
<b>Dieback</b>	Continual decline and death of wood tissue including twigs and branches.
<b>Failure</b>	Description of structural failure or wood fibres including fracture of branches, limbs and main stems.
<b>Fork</b>	Area or point of union between one or more limbs or branches.
<b>Hazard Risk Assessment</b>	Qualitative and quantitative appraisal of the potential for tree failure and the possible risk of harm or damage to persons or property.
<b>Local Planning Authority</b>	Body responsible for the administration of Statutory duties relating to Development Management.
<b>Multi-stem</b>	A single tree formed from 2 or more codominant main stems
<b>Occlusion</b>	Wood development enclosing an extant wound or pruning cut.

## Glossary of Terms

Term	Explanation
<b>Pruning</b>	The targeted removal of branches or limbs using saws or other tools.
<b>Physiological Condition</b>	Observation relating to a tree's physiology for example vigour, leaf area, growth rate, the presence of pests or disease.
<b>Root Protection Area</b>	Root Protection Area (RPA). Indicative area around a tree deemed to contain sufficient rooting volume to maintain the viability of a tree.
<b>Shelter belt</b>	A wind break is normally made up of one or more trees planted in such a way to provide cover from the wind.
<b>Structural Condition</b>	Observation relating to a tree's structural integrity and the presence of any physical defects.
<b>Suppressed</b>	Where a tree's development has been influenced or effected by the presence of competing vegetation.
<b>Target area</b>	The area within a tree's potential falling distance.
<b>Tree Constraints Plan</b>	A scaled plan indicating above and below ground constraints relating to the protection of trees
<b>Tree Preservation Order</b>	A legal order made by the local planning authority protecting specific trees in the interests of amenity.
<b>Veteran tree</b>	A tree that is of interest biologically, culturally or aesthetically because of its age, size or condition. Veteran trees are afforded special protection from development in the National Planning Policy Framework.
<b>Visual Tree Assessment (VTA)</b>	A method of assessment based upon the research developed to recognise dynamic responses of a tree to its surroundings.
<b>'V' Shaped Branch Union</b>	The union point between two branches that have grown at a tight angle, forming the 'V' shape. This structure is inherently weaker than the 'U' shaped union.
<b>'U' Shaped Branch Union</b>	The union point between two branches that have grown at a wider angle, forming the 'U' shape. This structure is considered to be the strongest and most optimised shape that a union can form.

## Appendix 5: Photographs

**Photograph 1**

View looking north-west towards pedunculate oak T9.



**Photograph 2**

View looking south-west towards pedunculate oak T10 and T11 (right and left respectively).



**Photograph 3**

View looking south towards common hazel T12.





**Photograph 4**

View looking north towards pedunculate oak T1, T2 and T3 (right, left and centre respectively).



**Photograph 5**

View looking north towards pedunculate oak T3.



**Photograph 6**

View looking south-west towards W1.



**Photograph 7**

View looking south towards W1.



**Photograph 10**

View looking south towards pedunculate oak T13 (centre) with Leyland cypress T16 in the background.



**Photograph 11**

View looking south-west towards W1 with common hazel T4 on the far right.







## Ecology Consultancy

The Ecology Consultancy is part of the Temple Group.

### **Making places better for people and wildlife**

**London** - Tempus Wharf, 33a Bermondsey Wall West, London, SE16 4TQ  
T. 020 7378 1914 W. [www.ecologyconsultancy.co.uk](http://www.ecologyconsultancy.co.uk) E. [enquiries@ecologyconsultancy.co.uk](mailto:enquiries@ecologyconsultancy.co.uk)

- **Sussex** - 3 Upper Stalls, Iford, Lewes, East Sussex BN7 3EJ T. 01273 813739
- **East Anglia** - 60 Thorpe Road, Norwich, Norfolk NR1 1RY T. 01603 628408
- **Midlands** - 1-2 Trent Park, Eastern Avenue, Lichfield, Staffordshire WS13 6RN T. 01543 229049
- **North** - Trinity Walk, Unit G37b, Market Walk, Wakefield, West Yorkshire WF1 1QR T. 01924 683558